

Patent Claims

1. A device for blocking and adjusting the inclination of fittings, in particular for adjusting the inclination with respect to each other of two components situated on a vehicle seat, such as a seat part and a backrest part, having a first fitting part (1) which has a latching toothing (1a), and a latching element (2) which has a mating latching toothing (2a), the latching toothing (1a) and the mating latching toothing (2a) being able to be brought into engagement and being able to be arrested in the engagement position by means of a clamping element (3) which is under the force of a spring (5), acts on the latching element (2) and is movable counter to the force of the spring (5) via adjusting means, characterized in that the clamping element (3) has a toothing (3b) in which a mating toothing (4a) situated on a toothed element (4) engages, the force of the spring (5) acting on the toothed element (4) and acting indirectly on the clamping element (3) via the toothing (3b) and mating toothing (4a).

2. The device as claimed in claim 1, characterized in that the spring (5) forms a constructional unit (E) with the toothed element (4).

3. The device as claimed in claim 1 or 2, characterized in that the first fitting part (1), the latching element (2), the clamping element (3) and the toothed element (4) can be pivoted relative to one another about respective pivot axes (X1, X2, X3, X4) preferably arranged parallel to one another.

4. The device as claimed in one of claims 1 to 3, characterized in that the spring (5) is designed as a torsion spring.

- 14 -

5. The device as claimed in one of claims 1 to 4, characterized in that the spring (5) is designed as a leg spring.

5 6. The device as claimed in one of claims 1 to 4, characterized in that the spring (5) is designed as a spiral spring, in particular as a flat spiral spring.

7. The device as claimed in one of claims 1 to 6,
10 characterized in that the clamping element (3) has, for moving the latching element (2), a control contour (3a) for interacting with a corresponding control contour (2a) of the latching element (2).

15 8. The device as claimed in one of claims 1 to 7, characterized in that the first fitting part (1), the latching element (2), the clamping element (3) and/or the toothed element (4) have fastening openings (O1, O2, O3, O4) arranged in particular concentrically about
20 their respective pivot axes (X1, X2, X3, X4).

9. The device as claimed in one of claims 1 to 8, characterized in that the toothing (3b) of the clamping element (3) and the mating toothing (4a) of the toothed
25 element (4) are external toothings designed at least in the manner of segments.

10. The device as claimed in one of claims 1 to 9,
30 characterized in that the latching element (2), the clamping element (3) and the toothed element (4) are fastened to a second fitting part (6).

11. The device as claimed in one of claims 1 to 10,
35 characterized in that the toothed element (4) is composed of an outer ring (4b) and an inner ring (4c) which are braced against each other by the spring (5).

12. The device as claimed in claim 11, characterized

in that the spring (5) is arranged concentrically with the outer ring (4b) and the inner ring (4c) and between the outer ring (4b) and the inner ring (4c).

5 13. The device as claimed in one of claims 1 to 12, characterized in that the adjusting means for moving the clamping element (3) are formed from at least one transmission rod which acts on the clamping element (3) and/or on the toothed element (4) and in particular
10 engages axially in the respective fastening opening (O3, O4) thereof.

14. The device as claimed in one of claims 1 to 13, characterized in that the spring (5) has a rising, in
15 particular a linearly rising, force/travel characteristic.

15. The device as claimed in one of claims 8 to 14, characterized in that a respective fine toothing (F3, F4) is provided around the periphery of the fastening
20 openings (O3, O4) of clamping element (3) and/or toothed element (4).

16. The device as claimed in one of claims 1 to 15, characterized in that a molded part (7) which can be
25 inserted into the clamping element (3) and/or toothed element (4), in particular can be pressed into the fastening openings (O3, O4) of clamping element (3) and/or toothed element (4) and is intended for
30 receiving one end of a transmission rod used as the adjusting means, the molded part (7) being of bushing-like design and having a profiled inner contour (K7) in its fastening opening (O7).